

The IBM System/360

Since our readers will be interested in an early account of some of the technical features of the newly announced System/360 series of data processing systems, we are including in this issue four introductory papers on this subject. Additional papers, in this Journal, the *IBM Systems Journal*, and elsewhere, will go into greater detail regarding the many technical matters which perforce are but briefly covered or left unmentioned in this issue.

It may be worthwhile to recall two trends in computing that are currently evident and that have led to the development of this new series of computers. These trends are: (1) the tendency for traditional scientific computing and commercial data processing to become more alike, and (2) the current expansion in computational requirements, both in science and in business, and the concomitant desire on the part of the individual user to preserve his ever-growing library of computer programs as he progresses to larger and larger machines.

The efforts to meet this challenge have resulted in some interesting developments:

1. The philosophy of an over-all system design approach, as described in the first paper.
2. A new configuration for computer circuit modules (Solid Logic Technology) as explained in the second paper.
3. Advances in the seemingly mundane field of serviceability, as outlined in the third paper. These advances were needed because of the paradoxical possibility that it could easily take longer to service an unusually reliable computer (with faults that are rare and consequently unfamiliar) than to service a conventional one.
4. The application of design automation procedures to all phases of the design process, using techniques which have heretofore been more discussed than practiced.

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Arthur L. Samuel, *Editor*